Note on the Spicules of *Chirodota geminifera*, Dendy & Hindle. By Prof. Arthur Dendy, F.R.S., Sec.L.S.

[Read 4th June, 1908.]

The species, Chirodota geminifera, was proposed in 1907*, for a specimen from New Zealand which had been collected in 1896 and had been preserved for eleven years in alcohol. The supposed distinguishing features of the species were the absence of "wheels" and the presence of sharply pointed sigmoid spicules apparently arranged in pairs. I have now found that the peculiar character of the sigmoid spicules is due to erosion. Experiments with Chirodota dunedinensis show that when the integument is treated for four or five minutes with $70^{\circ}/_{\circ}$ alcohol containing $5^{\circ}/_{\circ}$ of hydrochloric acid, the spicules are partially dissolved. The sigmata entirely change their appearance. They become sharply pointed at each end and may even appear double, resembling those figured by us for C. geminifera.

Fortunately I have found an old microscopic preparation from the type of *C. geminifera*, made while the specimen was still comparatively fresh and showing the spicules in their natural condition. There are no wheels, but the sigmata closely resemble those of *C. dunedinensis*, the one end being sharply reflexed and sharp-pointed and the other spirally incurved in a plane at right angles to the first. They are, however, a good deal smaller than those of typical *C. dunedinensis*, measuring only about 0.066 mm. from bend to bend as against 0.11 mm.

I have lately received some specimens of *Chirodota*, from one of the Islands lying to the south of New Zealand, whose spiculation is intermediate in type between that of *C. dunedinensis* and that of *C. geminifera*, and which lead me to conclude that the latter is closely related to the former. This question, however, will be discussed in another place.

^{*} Journ. Linn. Soc., Zool. vol. xxx. p. 95.